



STORMWATER CONTROL PLAN

APPLICATION AND COVERSHEET

PLANNING & BUILDING DEPARTMENT • COUNTY OF SAN LUIS OBISPO
976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

1) APPLICANT INFORMATION

Applicant Name: _____ Daytime Phone: _____
Mailing Address: _____ Zip Code: _____
Email Address: _____

2) PROJECT INFORMATION

☐ **PRELIMINARY** – Subdivision or Land Use Permit ☐ **FINAL** – Construction Permit

Permit Number: _____

Property APN: _____

FOR ITEMS # 3, 4, and 5 – Please Refer to Chapter 3 of the PCR Handbook

3) IMPERVIOUS SURFACE VALUES– Refer to the Glossary or Appendix C in the PCR Handbook

Pre-Project (sqft)

Impervious Area: _____ Total Project Area: _____

Post-Project (sqft)

Total Impervious Area: _____ Pervious Area: _____

New Imp. Surface: _____ Removed Imp. Surface: _____

Replaced Imp. Surface: _____

Total Site Disturbance _____

4) REVIEW FOR EXEMPTION– Refer to Figure 3-2 in the PCR Handbook

☐ **SWCP REQUIRED** – The project is located in a Stormwater Management (MS4) Area and involves at least 2,500 square feet of impervious surface area.

☐ **SWCP EXEMPT** – The project is exempt from a Stormwater Control Plan for the following reason:

- ☐ **Outside of MS4.** The project is not located in a Stormwater Management Area.
- ☐ **Less than 2,500 square feet.** The project creates or replaces less than 2,500 square feet of impervious area.
- ☐ **Previous land use approval.** The project has received land use approval prior to March 6, 2014. Project Number: _____

5) PERFORMANCE REQUIREMENTS

Check the applicable performance requirements and identify whether the project meets the requirement:

☐ **Exempt from SWCP**

☐ **#1 – Site Design** Performance Requirement Met? ☐ YES ☐ NO

☐ **#2 – Water Quality Treatment** Performance Requirement Met? ☐ YES ☐ NO

☐ **#3 – Runoff Retention** Performance Requirement Met? ☐ YES ☐ NO

☐ **#4 – Peak Management** Performance Requirement Met? ☐ YES ☐ NO

Are structural stormwater control measures proposed? ☐ YES ☐ NO

6) DESIGN CRITERIA – Refer to PCR Handbook, Appendix A

☐ Exempt from SWCP

Watershed Management Zone # _____

Applicable Rainfall Event (percentile): _____

24-hour Rainfall Isohyetal Line (in): _____

7) CERTIFICATION

☐ **Exempt.** This project is exempt from submitting a SWCP.

☐ **Full Compliance.** This project fully complies with all applicable Performance Requirements.

☐ **Alternative Compliance.** This project is unable to fully comply with all applicable Performance Requirements. As such, the applicant is requesting to use methods of alternative compliance.

Reason for non-compliance: _____

Method for alternative compliance: _____

This SWCP was prepared by a Registered Civil Engineer: ☐ YES ☐ NO

Engineer Name _____ License No. _____

I have completed this form accurately and declare that all statements here are true.

Preparer signature _____ Date _____

Preparer's name (if other than the Engineer listed above) _____

STORMWATER SITE DESIGN ANALYSIS

San Luis Obispo County Department of Planning and Building

File No _____

SITE DESCRIPTION

Is the project site within the Central Business District?

☐ YES

☐ NO

Was the project site previously developed?

☐ YES

☐ NO

Is the project site surrounded on all sides by development?

☐ YES

☐ NO

SITE DESIGN

For each of the following, please describe how this project has complied to the *maximum extent practicable* with the following site design and runoff reduction strategies (attach additional pages if needed):

1. Limit disturbance of creeks and natural drainage features.

2. Minimize compaction of highly permeable soils.

3. Limit clearing and grading of native vegetation at the site to the minimum area needed to build the project, allow access, and provide fire protection.

4. Minimize impervious surfaces by concentrating improvements on the least-sensitive portions of the site, while leaving the remaining land in a natural, undisturbed state.

Measures Homeowners Can Take to Reduce Stormwater Impacts

Everyone is strongly encouraged to reduce stormwater impacts associated with development and redevelopment by taking these actions:

- ☐ Protect soils from compaction that will ultimately be used in planted areas
- ☐ Amend soils designated to be used as planted areas
- ☐ Sumped planted areas are preferred over mounded planting areas to better retain irrigation and rain water.
- ☐ Direct driveway runoff and runoff from roof downspouts at least 10-feet away from foundations and towards planting beds and lawns where water can safely soak into the ground. Plant rain gardens.
- ☐ Protect existing trees from construction impacts by placing safety fence around the root zone of the tree (minimally the shadow of the tree canopy at high noon) and/or plant new trees
- ☐ Use permeable pavers for walkways, driveway and patios instead of concrete
- ☐ Through minor grading, encourage water retention on site (but away from foundations)
- ☐ Install rain cisterns and/or rain barrels to capture and re-use roof rain water

Stormwater Control Plan (SWCP) Checklist

Report

- ☐ Stormwater Control Plan (SWCP) Application (**Pages 1 and 2 of this package**)
- ☐ Stormwater Site Design Analysis (**Page 3 of this package**)
- ☐ SWCP Completed according to SWCP Template in **Appendix G of the PCR Handbook**.

Attachments

- ☐ Support Calculations
- ☐ Completed checklists (**Pages 5 to 13 of this package**) for SWCP and each applicable Performance Requirement or Alternative Compliance, as appropriate.
- ☐ Site Stormwater Assessment Exhibit.
 - Site map with (existing and proposed) topographic information
 - Delineation of sensitive areas, native vegetation and soils types. (Can be provided on multiple exhibits to supplement design strategy narrative)

For projects subject to PR 2, 3, and/or 4:

- ☐ Drainage Management Area (DMA) Exhibit.
 - Uniquely identify each DMA and indicate if the DMA is self-retaining (zero discharge), self-treating, or draining to a treatment/flow control facility.
 - Include location of all infiltration, treatment, or flow-control facilities, their tributary area and basis for sizing (rational C, NRCS CN value, Tc, etc)
 - Potential pollutant source areas (if applicable), including loading docks, food service areas, refuse areas, outdoor processes and storage, vehicle cleaning, repair or maintenance, fuel dispensing, equipment washing, etc.
 - Plan Set with Construction Details for drainage related items (as appropriate)
- ☐ Operation and Maintenance Documentation (if applicable) (**Appendix B-18 of the PCR Handbook**)
 - Constructive Notification
 - EXHIBIT A – Post Construction Stormwater Management System Operations & Maintenance Plan
 - PART 1 – General Information and Specifications
 - PART 2 – Drawings & Photos
 - PART 3 – Certification and Approval
 - EXHIBIT B – Post Construction Stormwater Management System Operations & Maintenance Checklist

Performance Requirement 1: Site Design and Runoff Reduction SWCP Checklist			
DESIGN STRATEGY (HANDBOOK LOCATION)		MEANS OF DEMONSTRATING COMPLIANCE	
1.	Limit disturbance of creeks and natural drainage features. (4.2.1)	Pre and post drainage feature map. Delineate natural drainage features on Site Stormwater Assessment Exhibit and DMA Exhibit, as applicable.	
2.	Minimize compaction of highly permeable soils. (4.2.2)	Site Stormwater Assessment Exhibit of soil types, overlain with development footprint	
3.	Limit clearing and grading of native vegetation at the site to the minimum area needed to build the project, allow access, and provide fire protection. (4.2.3)	Site Stormwater Assessment Exhibit with native vegetation, overlain with development footprint	
4.	Minimize impervious surfaces by concentrating improvements on the least-sensitive portions of the site, while leaving the remaining land in a natural undisturbed state. (4.2.4)	Site Stormwater Assessment Exhibit with delineated sensitive areas overlain with development footprint	
MINIMIZE STORMWATER RUNOFF BY IMPLEMENTING ONE OR MORE OF THE FOLLOWING DESIGN MEASURES:			
5.	MANDATORY SITE DESIGN MEASURES (SELECT AT LEAST ONE)		Selected
	a.	Roof runoff directed into cisterns or rain barrels for reuse? (5.2.1)	
	b.	Roof runoff directed into vegetated areas (safely away from building foundations and footings)? (5.2.2)	
	c.	Runoff from sidewalks, walkaways, and/or patios directed onto vegetated areas (safely away from the building foundations and footings)? (5.2.3)	
	d.	Runoff from driveways and/or uncovered parking lots onto vegetated areas (safely away from the building foundations and footings)? (5.2.4)	
	e.	Are bike lanes, driveways, uncovered parking lots, sidewalks, walkways, and patios constructed with permeable surfaces? (5.2.5)	

This checklist must be included with every SWCP (except for projects deemed EXEMPT). See Figure 3-2 of Chapter 3 to determine if your project is considered exempt, or regulated.

Performance Requirement 2: Water Quality Treatment SWCP Checklist

Project Level Documentation, identify

- ☐ Project Net Impervious Area
- ☐ Certification that on-site water quality treatment measures have been met on site, or if not achievable:
 - Documentation of the volume of runoff for which compliance cannot be achieved on site and the associated off-site compliance requirements
 - Statement of intent to comply with Water Quality Treatment Performance Requirement through Alternative Compliance

For each Drainage Management Area, provide:

- ☐ Unique DMA Number, area, and likely pollutant(s) of concern
- ☐ Water Quality Treatment Approach
N/A if self-treating, or,
Through the use of LID, Biofiltration or Non-retention Based Treatment System)
- ☐ Supporting calculations demonstrating compliance with Treatment Performance Requirement
- ☐ Plan sheet page and detail number (if appropriate) of Drainage Management Areas (DMA) Exhibit where construction details are provided for each DMA.

For DMAs using Low Impact Development Treatment Systems, provide:

- ☐ 85th percentile 24-hour storm event value, and basis of determination

For DMAs using Biofiltration Systems, provide:

- ☐ Statement indicating why an LID treatment system was not appropriate
- ☐ Surface loading rate approach, and basis of determination
(0.2 x per hour intensity, or 2 x 85th percentile hourly rainfall intensity)
- ☐ Calculations to demonstrate that the minimum surface reservoir volume is equal to the biofiltration treatment system surface area time a depth of 6-inches
- ☐ Construction detail (or reference to page on plans) which provides:
 - Minimum planting depth
 - Planting medium specifications. Either:
 - Specify 60 to 70% ASTM C33 sand, with 30-40% compost , or
 - Provide testing documentation demonstrating planting medium specified can minimally infiltrate at a rate of 5 inches per hour)
 - Plant selection consistent with Appendix L
 - Subsurface drainage/storage (gravel) layer with an area equal to the biofiltration treatment system surface area and having a minimum depth of 12 inches;
 - Underdrain with discharge elevation at top of gravel layer;
 - No compaction of soils beneath the biofiltration facility (ripping/loosening of soils required if compacted)
 - No liners or other barriers interfering with infiltration, except for situations where lateral infiltration is not technically feasible.

For DMAs using Non-Retention Based Treatment Systems, provide:

- ☐ Statement indicating why an LID, or Biofiltration treatment system was not appropriate
- ☐ Hydraulic Sizing Criteria used, and basis of determination
(Volume = to 85th percentile, 24-hour storm, or flow basis (2 x 85th percentile hourly rainfall intensity or 0.2 x inches per hour intensity)

Performance Requirement 3: Runoff Retention SWCP Checklist	
SITE ASSESSMENT MEASURES: (see table 3.5) Include an exhibit and narrative of the opportunities and constraints to implementing LID Stormwater Control measures based on the following items (as applicable):	
<input type="checkbox"/> Site topography <input type="checkbox"/> Hydrologic features including contiguous natural areas, wetlands, watercourses, seeps, or springs <input type="checkbox"/> Depth to seasonal high groundwater <input type="checkbox"/> Locations of groundwater wells used for drinking water <input type="checkbox"/> Depth to an impervious layer such as bedrock <input type="checkbox"/> Presence of unique geology (e.g., karst) <input type="checkbox"/> Geotechnical hazards <input type="checkbox"/> Documented soil and/or groundwater contamination <input type="checkbox"/> Soil types and hydrologic soil groups <input type="checkbox"/> Vegetative cover/trees	<input type="checkbox"/> Run-on characteristics (source and estimated runoff from offsite which discharges to the project area) <input type="checkbox"/> Existing drainage infrastructure for the site and nearby areas, including the location of municipal storm drains <input type="checkbox"/> Structures, including retaining walls <input type="checkbox"/> Utilities <input type="checkbox"/> Easements <input type="checkbox"/> Covenants <input type="checkbox"/> Zoning/Land Use <input type="checkbox"/> Setbacks <input type="checkbox"/> Open space requirements <input type="checkbox"/> Other pertinent overlay(s)
SITE DESIGN MEASURES Include in narrative, and provide supporting exhibits as necessary, to demonstrate that the project design has implemented the following design strategies (as applicable)	
DESIGN STRATEGY	MEANS OF DEMONSTRATING COMPLIANCE
1. Define the development envelope and protected areas, identifying areas that are most suitable for development and areas to be left undisturbed.	Site Stormwater Assessment Exhibit.
2. Conserve natural areas, including existing trees, other vegetation, and soils	Site Stormwater Assessment Exhibit with native vegetation, overlain with development footprint
3. Limit the overall impervious footprint of the project	Discussion regarding other building configurations considered (and ultimately rejected)
4. Construct streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided that public safety or mobility uses are not compromised	Discussion on minimum allowable widths, and rationale for using larger values (if applicable) or confirmation that minimum values were used (where applicable).
5. Set back development from creeks, wetlands, and riparian habitats	Discussion on set-back dimensions chosen.
6. Conform the site layout along natural landforms	Within the Drainage Management Area (DMA) Exhibit, show Topo survey with existing and planned contours cut and fill lines. Discussion of grading approach.
7. Avoid excessive grading and disturbance of vegetation and soils	Exhibit with native vegetation, overlain with planned disturbed area limits.

Performance Requirement 3: Runoff Retention SWCP Checklist Continued

STORMWATER STRUCTURAL CONTROL MEASURE SIZING

For Overall project,

- ☐ Certification statement indicating that the selection, sizing, and design of Stormwater Control measures meets the applicable Water Quality Treatment and Runoff Retention Performance Requirements, or, if not achievable
 - Provide documentation of the volume of runoff for which compliance cannot be achieved on-site and the associated off-site compliance volume
 - Statement of intent to comply with Water Quality Treatment and Runoff Retention Performance Requirements through an Alternative Compliance Agreement
- ☐ Documentation demonstrating percentage of the project's Equivalent Impervious Surface Area dedicated to retention-based Stormwater Control Measures

For each DMA,

- ☐ Indicate sizing strategy used
 - Hydrologic analysis and sizing methods as outline in [Attachment C](#)
 - Locally/regionally calibrated continuous simulation model that results in equivalent optimization of on-site runoff retention volumes
 - Hydrologic analysis and sizing methods, equally effective in optimizing on-site retention volumes of the runoff generated by the rainfall events specified in [Table 3-3](#)
- ☐ Provide supporting calculations demonstrating compliance with Runoff Retention Performance Requirement
- ☐ Indicate if a ten percent adjustment (based on technical infeasibility) is included in design approach (see [Appendix D](#))
- ☐ Indicate if off-site mitigation is included in design approach (see [Appendix D](#))

Performance Requirement 4: Peak Management SWCP Checklist

Project Level Documentation, identify

- ☐ Point source discharge locations
- ☐ Hydraulic Report demonstrating that post development storm water runoff peak flows discharged from the site do not exceed pre-project peak flows for the 2- through 10-yr storm events)
- ☐ Certification that on-site water quality treatment measures have been met on site, or if not achievable:
 - Documentation of the volume of runoff for which compliance cannot be achieved on site and the associated off-site compliance requirements
 - Statement of intent to comply with Water Quality Treatment Performance Requirement through Alternative Compliance

Performance Requirement 5: Special Circumstances SWCP Checklist

Project Level Documentation, identify

- ☐ Which types of Special Circumstances apply
- ☐ Which Watershed Management Zones (WMZ) the project is located in
- ☐ Identification if the project is located atop of a designated Groundwater Basin
- ☐ Proposed Performance Requirement modifications based on special circumstances
 - Peak Management
 - Runoff Retention

For highly altered channels,

- ☐ Vicinity map indicating channel location relative to project, and downstream receiving waters
- ☐ Narrative, and supporting calculations (as applicable) regarding anticipated impacts to downstream waters

For intermediate flow control facilities,

- ☐ Vicinity map indicating location of intermediate flow control facilities relative to project, and downstream receiving waters
- ☐ Quantification of pre-project tributary area to intermediate flow control facility performance
- ☐ Quantification of proposed post-project tributary area to intermediate flow control facility performance
- ☐ Summarize flow control performance data (pre and post) and include supporting performance information based on numeric, hydraulic modeling, including flow volumes, durations and velocities
- ☐ Narrative, and supporting calculations (as applicable) regarding anticipated impacts to downstream waters

The County must obtain approval from the Water Board prior to authorizing the use of a **Historic Lake and Wetlands Special Circumstance**. Your SWCP must include;

- ☐ Vicinity map delineating location of historic lake and/or wetlands relative to project
- ☐ Supporting technical information to substantiate the request
- ☐ Narrative, and supporting calculations (as applicable) regarding anticipated impacts to downstream waters
- ☐ Stamped submittal (by registered professional engineer, geologist, architect, and/or landscape architect)

Alternate (Off-Site) Compliance SWCP Checklist

The County will *only* consider alternative compliance for projects that:

- cannot retain the full runoff retention volume required, can demonstrate technical infeasibility for full retention AND are unable to dedicate 10% of the project's equivalent impervious surface area for retention purposes (see [Appendix D](#)).
- are within a Urban Sustainability Area (USA)
- are subject to a RWCQB approved Regional Stormwater Plan

Projects approved for alternative compliance must identify and secure rights to use an alternative site. Potential off-site compliance alternative projects might include green streets retrofits, off-site drainage features, riparian habitat restoration projects, etc. The off-site compliance alternative project must be located within the same watershed as the project.

It is recommended that discussions with County staff begin early in the development process regarding the acceptability of an off-site compliance alternative project.

Project Level Documentation, identify

- ☐ Indication of site conditions which are resulting in LID technical infeasibility
 - Depth to seasonable high groundwater limits infiltration and/or prevents construction of subgrade stormwater control measures
 - Depth to an impervious layer such as bedrock limits infiltration
 - Sites where soil types significantly limit infiltration
 - Sites where pollutant mobilization in the soil or groundwater is a documented concern
 - Space constraints (e.g., infill projects, some redevelopment projects, high density development)
 - Geotechnical hazards
 - Stormwater Control Measures located within 100 feet of a groundwater well used for drinking water
 - Incompatibility with surrounding drainage system (e.g., project drains to an existing stormwater collection system whose elevation or location precludes connection to a properly functioning treatment or flow control facility)
- ☐ Indication of site conditions which are resulting in Bioretention technical infeasibility
 - Biofiltration is not compatible with surrounding drainage system
 - Location available for biofiltration facility is in an area with identified erosion or landslide hazards
 - Location available for biofiltration facility is on a slope equal to or in excess of 8 percent
 - Location available for biofiltration facility is within 50-feet from the projected top of the slope (using projected angle of repose) that is great than 20%
 - Areas where runoff potentially contains industrial wastes
 - Areas where there is a higher risk of concentrated spills (such as gas stations, truck stops)
- ☐ Site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect, and/or landscape architect, demonstrating that compliance with the applicable numeric Post-Construction Stormwater Management

Alternate (Off-Site) Compliance SWCP Checklist
requirements is technically infeasible.
<input type="checkbox"/> Schedule for completion of offsite project with milestone dates to identify funding, design, and construction of the off-site project(s)